# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD COLORADO RIVER BASIN REGION

# MONITORING AND REPORTING PROGRAM NO. 00-003 FOR IMPERIAL IRRIGATION DISTRICT, OWNER/OPERATOR GRASS CARP HATCHERY El Centro – Imperial County

Location of Discharge: Central Main Drain No. 5, SE 1/2, of Section 32, T15S, R13E, SBB&M

#### MONITORING

- 1. The collection, preservation and holding times of all samples shall be in accordance with U.S. Environmental Protection Agency approved procedures. All analyses shall be conducted by a laboratory certified by the State Department of Health Services to perform the required analyses.
- 2. If the facility is not in operation, or there is no discharge during a required reporting period, the discharger shall forward a letter to the Regional Board indicating that there has been no activity during the required reporting period.

## **EFFLUENT MONITORING**

Effluent discharged to the Imperial Irrigation District's Central Main Drain No. 5 shall be monitored for constituents indicated below. A sampling station shall be established where representative samples of the effluent can be obtained.

Constituents	<u>Units</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>
Volume of Discharge to Central Main Drain No. 5	MGD	Measurement	Average Daily Reported Monthly
20°C BOD <sub>5</sub>	mg/L	24-hr Composite	Monthly
Total Suspended Solids	mg/L	24-hr Composite	Monthly
Settleable Matter	ml/L <sup>1</sup>	Grab at Peak Flow	Monthly
Hydrogen Ion	pH Units	Grab at Peak Flow	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly
Total Nitrogen	mg/L	Grab	Monthly
Chlorine	mg/L	Grab	Monthly

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<sup>&</sup>lt;sup>1</sup> ml/L – milliliter per Liter

Constituents	<u>Units</u>	Type of Sample	Sampling <u>Frequency</u>
Sulfate	mg/L	Grab	Monthly
Phosphate	mg/L	Grab	Monthly
Nitrate	mg/L	Grab	Monthly
Nitrite	mg/L	Grab	Monthly
Volatile Organics (EPA Methods 601 and 602)	μg/L	Grab	Annually
Turbidity	$NTU^2$	Grab	Monthly
Un-ionized Ammonia	mg/L	Grab	Monthly (Measured at the same time as pH)

## **OPERATION AND MAINTENANCE**

Activity	Reporting

To inspect and document all operational and maintenance problems and review each unit process

Annually

# RECEIVING WATER MONITORING

Representative samples upstream and downstream from the point of discharge shall be collected and analyzed in accordance with the following:

<u>Constituents</u>	<u>Units</u>	Type of <u>Sample</u>	Sampling <u>Frequency</u>
Dissolved Oxygen	mg/L	Grab	Monthly
Hydrogen Ion (pH)	pH Units	Grab	Monthly
Total Nitrogen	mg/L	Grab	Monthly
Ammonia	mg/L	Grab	Monthly
Phosphate	mg/L	Grab	Monthly
Sulfate	mg/L	Grab	Monthly

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<sup>&</sup>lt;sup>2</sup> NTU – Nephelometric Turbidity Units

#### CHRONIC TOXICITY TESTING

The discharger shall conduct chronic toxicity testing on the effluent as follows:

<u>Test</u>	<u>Units</u>	Type of Sample	Minimum Frequency <u>Annually</u>
Chronic Toxicity	tu <sub>c</sub> ³	Composite	Annually
Acute Toxiticy	% Survival	Composite	Annually

Both Test Species given below shall be used to measure chronic toxicity:

Test	<u>Units</u>	Test Duration (Days)	<u>Reference</u>
Fathead Minnow (Pimephales promelas)	Larval Survival and Growth Rate	7	Horning & Weber, 1989
Water Flea (Ceriodaphnia dubia)	Survival; Number of Young	7	Horning & Weber, 1989

Toxicity Test Reference: Horning W. B. and C. I. Weber (eds). 1989. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organism. Second Edition. U. S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Cincinnati, Ohio. EPA/600/4-89/001.

Dilution and control waters should be obtained from an unaffected area of the receiving waters. Standard dilution water should be used if the above source exhibit toxicity greater than 1.0  $tu_c$ . The sensitivity of the test organism to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results.

Chronic toxicity shall be expressed and reported as toxic units (tuc) where:

$$tu_c = 100/NOEL$$

and the No Observed Effect Level (NOEL) is expressed as the maximum percent effluent of test water that causes no observed effect on a test organism, as determined in a critical life stage toxicity test (indicated above).

Acute toxicity shall be calculated from the results of the chronic toxicity test described above and shall be reported along with the results of each chronic test. Acute toxicity shall be expressed as percent survival of test organism over a ninety-six hour period.

<sup>&</sup>lt;sup>3</sup> tu<sub>c</sub> – Chronic Toxicity Units

#### **REPORTING**

- 1. Monthly and daily reports shall be submitted to the Regional Board by the 15<sup>th</sup> day of the following month. Quarterly monitoring reports shall be submitted to the Regional Board by January 15, April 15, July 15, and October 15 of each year. Annual monitoring report shall be submitted to the Regional Board by January 15 of each year.
- 2. The discharger shall arrange the data in tabular form so that the specified information is readily discernible. The data should be summarized in such a manner as to clearly illustrate whether the treatment system is operating in compliance with the discharge limitations.
- 3. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed:
  - d. The individual(s) who performed the analyses; and
  - e. The results of such analyses.
- 4. Each report shall contain the following statement:

"I declare under the penalty of law that this document and all the attachments are true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

5. Reports shall be submitted to:

California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

6. A copy of the monitoring report shall also be sent to:

Regional Administrator U. S. Environmental Protection Agency Region 9, 65/MR, W-3 75 Hawthorne Street San Francisco, CA 94105

Ordered by:	original signed by/ Executive Officer
	April 12, 2000